AMENDMENTS TO THE SPECIFICATION

Please replace paragraph **[0017]** with the following paragraph:

[0017] Figure 1 illustrates a side view of inventive brake assembly 10 mounted to vehicle body 80. Brake assembly 10 comprises caliper 14 supported to vehicle body 80. Caliper 14 may be a sliding caliper, as is known in the art. Caliper 14 has spaced apart first 18 and second 22 brake pads. First brake pad 18 and second brake pad 22 are each mounted on first backing plate 26 and second backing plate~~s 26~~, 30 ~~respectively~~. Second brake pad 22 and second backing plate 30 are fixed and mounted to caliper 14. First brake pad 18 and first backing plate 26 are supported, as known, to move relative to caliper 14. These particular features of brake assembly 10 are well known in the art. One of ordinary skill in the art will appreciate that this invention may be used with other brake configurations.

Please replace paragraph **[0018]** with the following paragraph:

[0018] In contrast to conventional braking systems, brake assembly 10 is operatively connected to electric motor 70, which itself is mounted to caliper 50. Electric motor 70 provides the necessary braking forces to apply first brake pad 18 to rotor 12, clamping the ~~brake pads 18, 22~~ first brake pad 18 and the second brake pad 22 about the rotor 12.

Please replace paragraph **[0024]** with the following paragraph:

[0024] Figure 2 shows brake actuator 34 spaced from first backing plate 26, which mounts first brake pad 18. As shown, brake pad 18 is normally spaced away from

rotor 12 prior to braking. Upon brake actuation, as illustrated in Figure 3, brake actuator 34 moves into a position of contact with first mounting plate 26 at first speed S_1 and first force F_1 in the direction of arrow B towards rotor 12. Electric motor 70 rotates rotor 78 and connector 74 in the direction indicated by arrow T. Connector 74 rotationally drives second threaded member 54 along axis A. Because of differing thread characteristics, such as the second threaded member 54 having fine threads while first threaded member 46 has coarse threads and preload is greater on threads of second member, friction between second threaded member 54 and second threaded hole 66 will be greater than friction between first threaded member 46 and first threaded hole 62. Thread characteristics, such as overall thread length or thread geometry may also be used to obtain a desired friction. Furthermore, the amount of friction may be adjusted by a coating or other known techniques. Consequently, when second threaded member 54 rotates in the direction of arrow T around axis A, second threaded member 54 will rotate first threaded member 46 until the frictional load resistance between second threaded member 54 and second threaded hole 66 is overcome.

Please replace paragraph **[0026]** with the following paragraph:

[0026] At this instant, rotation of first threaded member 46 and second threaded member 54 encounters reaction force F_R from application of the brake actuator 34 to first brake pad 18 to rotor 12. This reaction force will be in the direction of arrow C and will cause first threaded member 46 with coarse pitch threads to wedge momentarily against the coarse pitch threads of first threaded hole 62 of caliper 14. As shown in Figures 1 and 4, caliper 14 will move in the direction of arrow C at least initially until second brake

pad ~~18~~ 22 is in contact with rotor 12. When first brake pad 18 and second brake pad 22 are in contact with rotor 12, reaction force F_R in the direction of arrow C will increase so as to wedge first threaded member 46 within first threaded hole 62. Rotational friction between first threaded member 46 and first threaded hole 62 will increase. At this point, second threaded member 54 continues to rotate within second threaded hole 66 at a slower speed but with greater force because the rotational frictional resistance between second threaded member 54 and second threaded hole 66 will be overcome by the reaction force F_R of the coarse threads of first threaded hole 62 on first threaded member 46. Thus, second threaded member 54 will continue to rotate even though first threaded member 46 is prevented from rotation by reaction force F_R. Thus, brake actuator 34 will continue to drive first brake pad 18 and second brake pad 22 towards rotor 12 at a slower speed but with a greater clamping force.